

AMERICAN BEE JOURNAL

THOMAS G. NEWMAN, Editor.



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The Air is Full of honeyed sounds. The bee.
Within the waxen lily's honeyed cells,
In monotone of mellow measures tells
Its yet unsated joyance: drowsily
The swallows spill their liquid melody
As down the sky they drop, and faintly
swell.

The tremulous tinkle of the far sheep bells,
While wind-haps sigh in every crowned tree.
Beneath the beechen shade the reapers lie,
Upon their lips a merry harvest tune;
Knee-deep within a neighboring stream
the kine.
Stand blinking idly in the clear sunshine,
And like a dream of oiden Arcady
Seems the sweet languor of the summer
noon.

—Clinton Scollard.

Mr. W. Z. Hutchinson has removed to Flint, Mich. Correspondents will please make a note of this.

Yes; Very Weak Colonies of Bees
can sometimes be wintered, but as a general rule it is much better to double them up, and thus make strong colonies.

The Editor has been confined to his house by sickness during the past week—the physician having fought valiantly against a threatened typhoid fever. Letters requiring personal answers have suffered accordingly. He is now at his post again, but with weakened energies.

Father Langstroth is now having a relief from his brain troubles again. We trust it may this time give him a long release from the "dark cloud," as he expresses it. He is one of the grandest men of modern times—full of "the milk of human kindness," and has a heart large enough to take in the whole human family.

By the Virginia Papers we notice that Mr. E. C. Jordan exhibited at the Winchester Fair, in Virginia, a SCRAP BOOK filled with selections for many years, even antedating the late civil war. It is a volume of great value.

Mr. Jordan also presented the editor of the Winchester News with samples of his domestic wine.

The Wonderful Eyes of the Bees are now the model used by scientists for experiments which are intended to demonstrate the "optic track" which leads to the brain. In Murray's Magazine we find the following very interesting article on this subject:

Any one who will take the trouble to examine with a lens the head of a bee will see on either side the large, rounded compound eye, and on the forehead or vertex, three bright little simple eyes. The latter are, as their name implies, comparatively simple in structure, each with a single lens. But the compound eyes have a complex structure. Externally the surface is seen to be divided up into a great number of hexagonal areas, each of which is called a facet, and forms a little lens. Of these the queen-bee has on each side nearly five thousand, the worker some six thousand, and the drone upward of twelve thousand. Beneath each facet is a crystalline cone, a so-called nerve rod, and other structures too complex to be here described, which pass inward toward the brain.

It will be seen, then, that the so-called compound eye, with its thousands of crystalline cones, its thousands of "nerve rods" and other elements, is a structure of no little complexity.

The question now arises, is it one structure or many? Is it one eye, or an aggregate of eyes? To this question the older naturalists answered confidently—an aggregate. And a simple experiment seems to warrant this conclusion.

Puget, quoted in Goldsmith's "Animated Nature," adapted the facets of the eye of a minute aphelinopterous insect of the genus Pulex—so as to see objects through it under the microscope. "A soldier who was thus seen, appeared like an army of pygmies, for while it multiplied it also diminished the object; the arch of a bridge exhibited a spectacle more magnificent than human skill could perform, and the flame of a candle seemed the illumination of thousands of lamps."

Although Mr. Cheshire, of London, in his book on the bee, adopts this view, and supports it by reference to a similar experiment, it numbers to-day but few supporters.

One is tempted to marvel at the ability of the drone to co-ordinate 24,000 separate images into a single distinct object. Picture the confusion of images of one who had sipped too freely of the sweet but delusive dregs of the punch bowl! Under similar circumstances human folk are reported to see double. Think of the appalling condition of an inebriate drone!

Those who believe the faceted eye to be one organ with many parts, contend that each facet and its underlying structures give not a complete image of the external object as a whole, but the image of a single point of that object. Thus there is formed, by a juxtaposition of contiguous points, a stippled image, or an image in mosaic. Hence this view is known as Miller's mosaic hypothesis.

Lowne has experimented with fine glass threads arranged like the cones and nerve-rods of the bee's eye, and finds that (even when they are not surrounded by pigment, as are the elements in an insect's eye) all oblique rays are got rid of by numerous reflections and the interference due to the different lengths of the rays. Some modification of the mosaic hypothesis is now generally adopted, and Dr. Hickson has recently worked out with great care the structure of "the optic tract" which lies between the crystalline cones and the brain.

Now is the Time to protect the bees from winter's cold blasts, if they are to remain on the summer stands. Pack them with chaff or leaves, or if nothing better is at hand, build a corn-fodder shock around each hive, or set boards up around them to protect them from the wind. Of course it would be better to pack them all around with 6 or 8 inches of chaff; shade the entrance from the direct rays of the sun, so that the bees will not be enticed out when it is too cold.

The Bees in Winter.—A correspondent writes us as follows:

I have had a discussion with a neighbor about the condition of bees in winter. He thinks that they need not be disturbed at any time after being prepared in the fall and left on the summer stands. I contend that they need careful watching, and sometimes manipulation. We have agreed to leave it to you to decide as to which is right.

If they have plenty of food for winter, and are well-packed or protected from the winds and severe weather, they do not need much manipulation. But they should have careful watching. Mice are sometimes troublesome, and make inroads; dead bees clog up the entrances; ice accumulates on the alighting-board; caps blow off in high winds, and sometimes the whole hives are tipped over. These calamities should be remedied as soon as possible. A piece of wire 18 inches long, with a short hook bent at the end, is very handy with which to clear the entrances. During cold weather the bees require but little air, and the entrances should then be contracted, but in warm weather they need more; if closed in, they may become excited and smother.

No Excitement Here.—It has been asserted in other cities that there will be considerable excitement in Chicago during the week of the Anarchists' executions. Several have written to us to ask if it is likely to interfere with the Bee-Keepers' Convention. To all, we have written that there is no excitement here, and we do not think there will be any trouble. Mr. Grinnell, the States' Attorney, makes this statement:

There is no such state of feeling in Chicago, and no such extraordinary precautions have been made. The police are simply doing what they always do when an execution is about to take place. The people are not moving out of the houses near the jail in anticipation of an outbreak. My office is as near as any place can well be to the place of confinement, and if a bomb was to be found anywhere one might expect to look for it there, but I have not the slightest apprehension of anything of the kind.

No one need consider the matter in connection with the Bee-Convention.

Honey Production in England.—The London Journal of Horticulture makes the following statement about the amount of honey produced in England since we visited Europe in 1879. Then there had been no advancement worth mentioning in 40 years:

There has been a great increase in bee-keeping throughout the United Kingdom during the past seven years, and where cwt. of honey were produced ten years ago, tons are now gathered in and sent to market.

When Mr. Cowan was here he remarked to us: "You would be astonished to see the present state of the pursuit in England now, as compared to what it was when you visited us eight years ago!"

Among the Industries of Paris, says the Leeds (Eng.) Mercury, the keeping of bees is one that is much practised, and frequent complaints have been made to the police about the nuisance this occasioned. One inhabitant alone in the 19th Arrondissement keeps from 800 to 900 colonies, and there are a great number to be found in the 13th Arrondissement, near the goods station at Ivry.

QUERIES

With Replies thereto.

[It is quite useless to ask for answers to Queries in this Department in less time than one month. They have to wait their turn, be put in type, and sent in about a dozen at a time to each of those who answer them; get them returned, and then find space for them in the JOURNAL. If you are in a "hurry" for replies, do not ask for them to be inserted here.—ED.]

Water for Bees when Shipping.

Query 489.—1. In shipping bees in hives, is it necessary to provide water for a confinement of from one to two weeks? 2. What is the best way to provide the water?—W., Tennessee.

It is not, if they have honey or "Good candy" for food.—A. J. COOK.

I have never provided any water for the colony when shipping bees, and I have been fairly successful.—G. M. DOOLITTLE.

1. If the weather is cool, water is not necessary. 2. A tin can with two compartments with a small perforation at each end.—J. P. H. BROWN.

Not unless they have a very large amount of brood, and it is always best not to ship them at such a time.—DADANT & SON.

1. Yes. 2. Directions should be given to Express Messengers to slightly sprinkle the bees with water every 24 hours. In shipping bees 500 miles by Express, no water is necessary.—G. L. TINKER.

1. Yes. 2. Sponges or cloths kept well wetted are good. If any empty combs are in the hive, they might be filled with water by pouring from a watering can at a height of 3 or 4 feet.—C. C. MILLER.

Yes, if there is unsealed brood in the hive, and you wish to preserve the life of that brood. I have accomplished it by fastening in the hive a sponge, or roll of rags, saturated with all the water it would hold without dripping.—JAMES HEDDON.

Yes, it is much better. Cloths or sponges wet in water will be of some help, but I should think that a bottle filled with water, its mouth stopped with a sponge, and turned upside down, would be better.—W. Z. HUTCHINSON.

1. Giving my experience, it is. 2. A pad made of cotton cloth and filled with fine sawdust, *well soaked in water* will hold moisture for a long time and is the best plan I have any knowledge of. When shipping bees by the pound, etc., I have tested the sawdust pad thoroughly, and it has stood the severest trials, holding the moisture till the bees reached the end of their journey, be it long or short.—G. W. DEMAREE.

1. Unless the weather is very hot, I do not think there is any need of a supply of water, if the bees are properly packed. 2. I should, if giving moisture at all, use cotton waste or

something absorbent in its nature, in one end of the shipping-box, protected by coarse wire-netting and saturated with water. A card could be tacked on the end where the absorbent is placed, asking the Express Messenger to pour in a little water daily.—J. E. POND.

If bees were to be confined for two weeks in a shipping condition, they would need water. If you had only said whether some one was going in charge of the bees, it would be so easy to say how to provide the water.—H. D. CUTTING.

Water is often necessary for brood-rearing, etc. A wet sponge will supply it, or an empty comb may be filled with water.—THE ELF OR.

Preparing Hives for Shipping Bees.

Query 490.—1. What is the best way to prepare the hives for shipping bees? 2. How much space should be given above and below the frames? 3. How much wire-cloth should be used in giving ventilation, and in what manner is it used?—C., Tennessee.

1. Fasten the frames securely. 2. I shall in the future use 2 inches above the frames. 3. The whole size of the top of the hive.—G. M. DOOLITTLE.

Nail the ends of the top-bars to the hive. Have the combs stand parallel with the track, if on a railroad. Have a wire-cloth both above and below the hive, with a space of 3 inches between it and the frames.—W. Z. HUTCHINSON.

1. Plenty of room and ventilation, with a notched strip to hold the frames at the bottom. 2. A half inch below, and from 1 to 2 inches above. 3. It depends upon the season and size of the colony—better too much than not enough.—J. P. H. BROWN.

1. Much depends upon how warm it is. In hot weather a covering of wire-cloth the full size of the top of the hive is none too much. 2. An open space of 4 inches between the frames and the wire-cloth will do, with no extra space below the frames, or, if the hive admits it, part or all of the open space may be provided at the entrance.—C. C. MILLER.

All depends upon the season of shipment. Bees can be sent in hives entirely closed, during the cold months. In summer they require more or less ventilation; sometimes it is best to give them 3 or 4 inches above the combs, and to cover the entire bottom and top with wire cloth. Shipping bees requires judgment and some practice.—DADANT & SON.

If you had only said, by rail or wagon, the distance, etc., then it would be less difficult to give suggestions. 2. Two inches above and below, with wire-screens over the entrance, and over the whole open top. You can leave the hive on the bottom-board or platform, but I prefer to cut holes at least 4 inches square, and cover them with wire-cloth. Make a frame two or more inches deep, and fasten it on top of the brood-chamber, and tack wire-cloth on top, over all.—H. D. CUTTING.

If the frames come level with the top of the hive or brood-chamber, a cleat may be nailed across each end of the frames, that will hold them in place. In the spring, a sheet of wire-cloth to cover the frames and entrance is sufficient; but if the weather is very warm, a case 6 inches deep, the full size of the hive, covered with wire-cloth should be put on top, with wire-cloth over the entrance, or over the bottom of the hive, if the colony is very strong.—G. L. TINKER.

Be sure that all is firmly nailed, so that the bees cannot possibly get out. Use old or wired combs, that they may not break loose. Be sure that the frames are secure, either nailed at the rabbet, or so held by a board that they cannot possibly move. In hot weather cover entirely above with wire-gauze, and also at the entrance. (See Dr. Miller's admirable little book.) Less ventilation is required in cool weather than in warm.—A. J. COOK.

1 and 2. My way is to space the frames evenly, using 6 frames in a 14½ inch wide Langstroth hive; giving, say 2 inches of open space at the top. 3. I cover the whole top with wire-cloth well protected; at each corner of the bottom I tack a strip 3 or 4 inches long, and 1½ inches thick, on which I screw the bottom-board, covering the open space on the sides and ends with wire-cloth. This gives ample ventilation. Holes may be bored in the bottom, but if the hive is covered up with other freight they may prove to be entirely useless.—J. E. POND.

1. That is a matter that may be varied considerably. 2. That depends upon the size of the colony and the season of the year in which they are shipped. In the late fall, winter and spring, the bees may be confined in their ordinary breeding quarters by means of a coarse cloth over the top of the hive, and some strips of wire-cloth over the entrance to the hive. But in hot weather there should be a space 3 or 4 inches above the tops of the frames, which should be covered with wire-cloth the full size of the top of the brood department.—G. W. DEMAREE.

I always close the entrance tight, because I can nail a stick over it quicker, stronger, and cheaper than wire-cloth. I cover the top with a wood frame the full size of the top of the hive, 2 inches deep, with wire-cloth tacked over the entire surface. This 2-inch space between the wire-cloth and the frames is a great advantage. On top of the screen frame I nail three pieces across the narrow way, 1½ by ½ inches, and as long as the frame is wide; one at each end, and one across the middle. This protects the wire-cloth, and if the weather is not too hot, one hive can be set on top of the other in the cars. When the weather is too warm, I put on only one cleat, and that in the middle, and make it rounding so that they cannot place one hive on another. I fasten these screens to the hive with ten-penny nails, driven edgewise through the sides of the frame near

the corners, four nails to the frame. These nails reach through and go into the head of the hive an inch and a half. Sometimes I fasten at the corners, in the way of toe-nailing, with small nails.—JAMES HEDDON.

1. Cut strips $\frac{1}{4}$ -inch square, and put down between the side bars of each frame, so as to hold the combs securely. 2. A space of $\frac{1}{2}$ -inch below, with from 2 to 4 inches above will do. 3. If the hives have porticos, nail wire-cloth over the outer edges of them. If not, nail wire-cloth over the entrances, and give ventilation and a place of refuge in case of breaking down of combs, over the frames.—THE EDITOR.

Correspondence.

This mark \odot indicates that the apiarist is located near the center or the State named; δ north of the center; ϑ south; \diamond east; \diamond west; and this \triangle northeast; \star northwest; \diamond southeast; and ϑ southwest of the center of the State mentioned.

For the American Bee Journal.

"Basswood" vs. "Linden."

DR. A. B. MASON.

For several months past—in fact ever since the appearance of Mr. S. T. Pettit's article under the above heading, on page 23, I have intended to answer him, and also review some statements made by him in the *Canadian Bee Journal* for 1886, page 167, that called forth my remarks as reported on page 805 of the *AMERICAN BEE JOURNAL* for 1886.

I commenced at once to do as Mr. Pettit suggested on page 23, above referred to, "to get average samples of basswood honey from the different points of the United States, especially from the southern limit at which this tree produces honey," and wrote to one or more well-known bee-keepers in Virginia, West Virginia, Kentucky, Missouri, Kansas, Nevada and California, and to every State and Territory south of the above-mentioned, for a sample of basswood honey. I did not get the last answer till May, since which time I have been too busy working to get bread and butter, and honey, etc., for our family, to indulge my desire to write sooner.

It is possible that many of the readers of the *AMERICAN BEE JOURNAL* do not understand why I called attention to Mr. Pettit's article, and why he refers to what I am reported as having said on page 805, mentioned above; and the same number of readers may not even be aware that there was an "Indian and Colonial Exhibition" in England last fall, and that our Canadian bee-keeping cousins made a very large and creditable display of honey, and that previous to, during, and for some time after the exhibition, that the *Canadian Bee*

Journal was "chock full" of what was to be, and was done at the "Colonial;" and also contained some pretty warm words about what was done with some of the \$1,000 granted them by the Government to help pay the expense of making their honey exhibit at the "Colonial."

That all the readers of the *AMERICAN BEE JOURNAL* may know just how our Canadian cousins started out to place their basswood honey in the "markets of the world," especially the English, it may be well to copy Mr. Pettit's article and the Editor's remarks from the *Canadian Bee Journal* for 1886, as found on pages 167 and 168. It is as follows:

LINDEN HONEY.

The question whether Canadians shall in the future name the honey produced by the Canadian linden tree, linden honey, or "basswood" honey, has been carefully considered by the managing committee. And I am proud to be in a position to state that the term "linden" has been unanimously adopted. So that name will in the future be used by all Canadians. Hence, no more "basswood" honey in Canada.

R. McKnight, Esq., of Owen Sound, whose opinions we all so much respect, says, "Let it be linden, as at once more respectable and correct. Basswood is a term known to the people of England only in connection with things disreputable."

Our American friends use the term "linn," or "basswood," but generally "basswood." Now, we desire to make everything in connection with our exhibition, and in the markets of the world, too, as distinctively Canadian as possible. So let us all use the name linden on our labels, and in our conversation both at home and abroad.

Another thing, our fine, richly-flavored, crystal "linden" honey is superior to American "basswood" honey. Messrs. C. F. Muth & Son, of Cincinnati, O., who perhaps handle more honey than any other firm in America, class American basswood honey with buckwheat and other fall honey, thus proving conclusively that the bulk of American basswood honey is inferior to Canadian "linden" honey.

Allow me further to say that there are two varieties of trees in Europe belonging to the linden family, and two in America. *Tilia Americana*, American linden, or common basswood, and *Tilia heterophylla*, white linden, are as emphatically true linden as any tree in Europe.

But it seems certain that the further south the honey is produced by this fine tree, the poorer it is. No question but our American cousins will adhere to the name basswood, that they have so long used; and I am sure that Canadians have no objections to that, and we will all use the name "linden," both for honey and sections. And so, by the way, our products will all stand upon their own merits.

A little friendly rivalry in the markets of the world very likely will do

us all good.—S. T. PETTIT, President Ontario Bee-Keepers' Association.

We were not aware that friend Muth classed basswood and buckwheat in the same category. We never saw American basswood as dark as buckwheat. The Northern States should, and we believe do, produce just as fine basswood honey as we. We agree with friend Pettit, that it is well to have some distinctive name by which this particular brand of honey shall be known "the world over," and as the word "linden" has never had the stigmas cast upon it that "basswood" has, the former certainly should be the name. Then our English friends will not be able to class our honey with "basswood nutmegs," "basswood hams," etc.—EDITOR OF THE CANADIAN BEE JOURNAL.

With the very kindest, and most friendly feeling towards Mr. Pettit personally, I hope I shall be pardoned for any seeming unkind expressions that I may use in reviewing his articles.

I was thoroughly surprised at some of the statements made by Mr. Pettit in the above article, and some of the comments of the editor; and on re-reading it, my surprise was somewhat mixed with vexation, and the more I thought about it, the more thoroughly did I become convinced that it was a "put up job," and a deliberate and unwarranted attempt, by misrepresentation and fraud, to build up a name and market for Canadian basswood honey, in markets and localities where United States basswood honey had already been introduced; and I feel quite confident that if I had been in the presence of that august "managing committee" at the time it was classing United States basswood honey with "buckwheat and other fall honey," it would have had something to have thought about, for a few minutes at least, besides basswood and linden honey, and I pity the ignorance, or the dishonesty (I do not know which it is) of every one, be he Canadian, Englishman, or "any other man," who has said that the basswood honey produced in the United States is inferior to the "fine, richly-flavored" Canadian article, because of its quality or color.

To be sure, the name "basswood" is used as the name of the honey produced by the linden tree in the more northerly portion of the United States and Canada, but in the southern part of the United States, and as far north as the centre of this State (Ohio), the tree and honey are both called either linden or "linn," and to speak of basswood trees in that locality, to any one not acquainted with the name as used further north, is to mention a (to them) new kind of tree, until told it is the same as linden.

Where Father Langstroth lives, this tree is known as linden, and was so called by him more than a quarter of a century ago in his "Treatise on the Hive and Honey-Bee." It is also known as linden in some localities further north.

While on a business trip in the East last summer, a friend who spent some time in Wisconsin several years ago, told me of a forest of linden trees that extended along a road, on both sides, over three miles, and he did not learn how far it extended each way from the road, and it was known as the "Linden Forest," being composed of linden trees only. So I judge that the name "linden honey" is not a new one, probably having been in use in the United States ever since it first became known what flowers produced the different kinds of honey, and was simply discovered, abducted, or stolen and adopted by the "managing committee."

With these facts before us, I wonder if it will occur to the mind of the average Canadian, that the word basswood is of their own coining, and that the people in the northern portion of the United States, owing to their "nearness" to Canada, have also adopted it.

And now, after the "Yankees" have established a name for their "fine, richly-flavored crystal" basswood honey in the "markets of the world," especially the English market, it seems that the Canadians, wishing to take advantage of its popularity, have previous to, during and since their "Colonial Exhibit," been pushing their basswood honey under a (to them) new name, calling it (in a "wily" way) superior to "American basswood" honey.

If some of Mr. Pettit's assertions did not carry upon their face the evidence (at least to some of us) of their untruthfulness, they might be put down as "bombast"—which, of late, has so frequently shown itself in the writings of our Canadian and English relatives.

Can it be possible, as Mr. McKnight says, that the term "linden" is "at once more respectable and correct" than the term "basswood"? If the term *has* at any time been used in connection with something not "respectable," why should the name itself be any the less respectable? Because so many MEN are not respectable, it by no means follows that Mr. McKnight is not respectable because he is a man, and ought not to acknowledge the name man in order to claim respectability.

Mr. Pettit says: "Our fine, richly-flavored, crystal 'linden' honey is superior to American 'basswood' honey." He certainly is not well informed in regard to the quality, color and flavor of the basswood honey produced in the United States, or he has deliberately made what he ought to have known is a false statement. He further says: "Messrs. C. F. Muth & Son, of Cincinnati, O..... class American basswood honey with buckwheat and other fall honey, thus proving conclusively that the bulk of American basswood honey is inferior to Canadian 'linden' honey." If the testimony of one is "conclusive" proof, then I have a large number of "conclusive" proofs that Mr. Pettit has made statements, for true ones, that are absolutely false.

If the Messrs. Muth have classed basswood honey as Mr. Pettit says, they have made a bigger blunder than I can give them credit for. But if they have so classed it, it does not follow that they were right; and it seems to me that any one, in the least posted as to the color and quality of the "fine, richly-flavored crystal" basswood honey produced in the United States, would know that Mr. Pettit's statements were made without his being well informed in the matter, and such statements are slanders upon one of our finest grades of honey.

"Slander, that worst of poisons, ever finds An easy entrance to ignoble minds."

Now for "just a little" of the "thus proving conclusively that the bulk of the American basswood honey is NOT inferior to Canadian linden honey." Mr. James Heddon, whose opinion on this subject is probably not a whit less valuable than Mr. Pettit's or any one else's, in an article in *Seed Time and Harvest* for February, 1887, speaking of the different kinds of honey, says:

"The basswood is very white and fine flavored. It is the whitest of all honey. Last season I presented Father Langstroth with his choice of a 100-pound keg of either grade, and he chose the basswood," and wrote, "That he believed there was no other honey to compare with it in richness." And then says: "It is a favorite on our table." Two "conclusive" proofs; but here is another:

The editor of the *AMERICAN BEE JOURNAL*, who, it will be conceded is first-class authority, on page 24, at the close of Mr. Pettit's article, says: "United States basswood honey is by no means dark, and is not so classed in this city. That it varies in different localities is true, but it is never dark." Another "conclusive" proof.

One more "conclusive" proof, and it comes from a "conclusive" source, and on this account is more valuable than any other, it being a Canadian, and none other than the editor of the *Canadian Bee Journal*, who says: "We never saw American basswood as dark as buckwheat. The Northern States should, and we believe do, produce just as fine basswood honey as we." "Conclusive," eh?

One thing more: The editor of the *Canadian Bee Journal*, after speaking in favor of "linden" as the "distinctive name" for Canadian basswood honey, says: "Then our English friends will not be able to class our honey with 'basswood nutmegs,' 'basswood hams,' etc." Why not do as the boy did when he drew a picture and wrote under it, "This is a horse?" Just mark the packages sent to the English market, "This is Canadian Linden Honey," and then keep close watch of the market and see that no "basswood nutmegs" or "basswood hams" are marked the same way by some "wily" Canadian, and put on the market, thus defrauding the unsuspecting and "modest" Englishman.

■ One of three things seems evident, namely, either "our English friends"

must be very poor judges; or the "basswood nutmegs," "basswood hams," etc., dealt in by "our English friends" are so much like "our fine, richly-flavored crystal 'linden' honey," that they cannot tell the difference; or it is a huge "joak."

Is it not about time some one just slightly pricked some of the egotistical and bombastic bubbles that have been sent up by some of our "cousins across the border," and other relatives on the other side of "the pond"?

Auburndale, Ohio.

[We have handled thousands of pounds of basswood honey, which, when candied, was as white as lard, and of as rich and fine flavor as any one could ask for or desire.

Dr. Mason has given some excellent proofs on his point, but will no doubt pardon us for adding another. It is also from a Canadian, and one of her best and brightest sons—the Hon. Louis Wallbridge, Lord Chief Justice of Manitoba, and an ardent lover of the pursuit of bee-keeping, as well as a practical apiarist and an eminent and learned jurist. We formed his acquaintance in the office of the *AMERICAN BEE JOURNAL*, to which paper he has been a subscriber for the past 17 or 18 years. In 1881, before the Ontario Agricultural Commission, he testified as follows in answer to a question concerning the quality of the honey of "other countries" as compared with that of his locality (Belleville, Ont.) and other portions of the Province of Ontario. He said:

I think the white clover and basswood the best. There are in all the accounts published a good deal of brag, for which due allowance must be made. I find that bee-keepers over-estimate. The occupation is of an exciting character, which may account for it.

After making that due ALLOWANCE for "brag," and the tendency to over-estimate, of which the Hon. L. Wallbridge speaks, the conclusion is inevitable that the basswood honey which he refers to is one and the same, as to quality, whether grown north or south of the great lakes, either in Canada or the United States, for he mentions no difference, and makes these remarks in reply to the question concerning the quality of honey in Ontario and other countries.

Then as to the average production of honey, he said :

Last year, 1879, a very good year for each hive, taking that as the basis of calculation, averaged 98 pounds, extracted. This is more than a general average—perhaps 75 pounds would be a fair average; 40 pounds would be a fair average of comb honey. I have

taken one swarm and 101 pounds of comb honey from one hive. This is extraordinary.

But why all this nonsensical *bosh* about the difference between Linden and Basswood honey? Is it not born of jealousy, nurtured in contention, and reared in envy and discord? Its assumption is certainly useless, senseless, and entirely worthless!—ED.]

Practical Farmer.

The Great Wintering Problem.

DR. W. G. PHELPS.

This question is again before us, and in spite of the assertion by one and another that it is no problem to them, that they feel perfectly safe in wintering their bees, the question comes to many of us with a good deal of force. How shall I prepare my bees so as to carry them safely through the winter? Let us look at some of the requisites that are considered positively necessary to successful wintering:

1. Abundance of young bees. The life of a worker-bee is very short. In the height of the honey harvest it is found by experiment that the whole population of the hive (with the exception of the queen) will be changed in from six to eight weeks. Bees at this time of the year do not die of old age, but wear themselves out, or rather, I think, they wear their wings out, and there comes a day when they will load themselves up so heavily that they fail to return to the hive. We often see the old bees with but stubs of wings trying two or three times to rise from the entrance on their outward flight, before succeeding. During the leisure of winter, bees live much longer, those hatched in September and October living through to March and April; so if we want our bees to go into winter in good condition, they must be reared during those months; and if honey is not coming in from the fields during that time, they must be fed in order to encourage brood-rearing. The older bees will die too soon in the spring before enough young ones are reared to keep up the cluster and do the work of the hive.

2. Abundance of food, and that readily accessible to the bees. As before stated, 20 to 25 pounds of honey or syrup for each fair-sized colony, capped over before cold weather sets in, is considered sufficient for winter, and until bloom opens in the spring. In order that the bees may make use of these stores, there must be some way provided whereby they may shift their cluster without having to pass around or under the frames, either by cutting small holes half an inch or more in diameter, through the combs near the middle of the length, and about 2 or 3 inches from the top; or by placing sticks across the top of the frames an inch or so apart, provide means for them to pass over, and so shift from one part of the hive to

the other. By placing an inverted wooden butter-dish, such as the grocers use, across the top of the frames, a clustering chamber is formed, which the bees will take possession of and so gain access to the frames over the top, and being enabled to form a compact mass in the warmest part of the hive, save food and the wear and tear consequent upon its consumption in order to make the necessary heat.

3. Limited space. The size of the hive should be regulated according to the size of the colony, by removing extra frames and contracting the space with a division-board, so that the bees will be rather crowded for room, and so have less space to keep warm. The combs should be spread a little further apart for winter than for brood-rearing in the spring and summer, say 1½ inches from centre to centre, instead of 1¾ inches as is usual, by that means allowing more of the bees to cluster together between them.

4. Good ventilation at the bottom of the hive; that is, the entrance should be kept clear and open, but no upward ventilation, except so much as may pass through 3 or 4 inches of chaff or sawdust packing, which may be placed over the bees to keep down the heat. Where openings are left above the bees, either from a misplaced mat or ill-fitting cover, it causes a draught of air through the hive, and consequently great loss of heat, which should be particularly guarded against.

Galena, & Md.

For the American Bee Journal.

About the Fasting of Bees.

WM. F. CLARKE.

The editorial note to Mr. Jones' article, page 681, where it is asserted that bees can fast for three months without sustaining injury, invites a few words from me.

I have no idea how long bees can safely fast, or for what periods they abstain from food when the weather and surrounding circumstances are favorable to their hibernating, but I believe that their normal winter condition, in this climate, is one in which they become dormant for certain periods during which they do not feed. Every well-authenticated case of bees fasting for a certain length of time, tends to corroborate my theory. Mr. D. A. Jones, in his experiments for the cure of foul brood, has demonstrated that a fast of three weeks does not hurt bees if they are kept perfectly quiet. He thinks if we only knew how to regulate the temperature, they could be safely kept without food for a very long time.

I could not desire a better statement of my theory than that given by Mr. D. A. Jones in the *Canadian Bee Journal* of Oct. 19, viz: "There is no longer any doubt in our mind that when a colony of bees only consumes a couple of pounds of food during the winter, they must lie in a semi-dormant state much of the time, or

'hibernate,' as friend Clarke puts it; because two or three pounds of stores would scarcely fill the sacs of an ordinary colony of bees, yet it is not an uncommon thing to have them wintered on less than two pounds."

What we want is a thorough series of experiments in relation to this matter. I have never been, and am not now in a position to make them. It requires a larger number of colonies than I can keep; facilities for both out-door and cellar wintering, which I have not; and continuous observation of results, which I am not able to bestow, as my duties often call me away from home.

Dr. Tinker, Prof. McLain, Mr. Jones and others have thrown much light on the subject by their investigations, and I am not without hope that before very long we shall get some fixed principles to guide us as to the right temperature and surroundings to secure the condition of dormancy or hibernation—call it what you will—which bee-keepers generally know to be the chief prerequisites for perfect wintering. The scarcity of stores the present season makes it a favorable time for these experiments, and I trust the coming winter will increase our stock and store of knowledge on this important subject.

Guelph, Ont.

Western Plowman.

The Restoration of Paying Prices.

C. H. DIBBERN.

One advantage that bee-keepers will secure by the very small crop, will be the restoring of prices to a paying basis. It remains to be seen whether they will allow competition, or a lack of proper distribution, to again force ruinous prices on them, as soon as a reasonably fair crop is produced.

I do not think that the very low prices prevailing for the past few years, were caused by over-production, but rather a

LACK OF JUDICIOUS DISTRIBUTION.

Here is a case in point: A few days ago, while passing a store, my notice was attracted to some small baskets of what appeared to be very fine peaches. They were packed in nice, new baskets with skeleton covers of alternately white and red colored wood, and the fruit itself was further covered with salmon-colored mosquito netting, giving to it a hazy and very pleasing effect.

Upon inquiring the price, I was somewhat surprised to find it \$1 per basket, holding not more than one-half peck. I remarked that it was pretty high; but the dealer produced his bill from a commission merchant showing that they cost him 90 cents. Thinking that only a very reasonable profit, I bought a basket and took them home for Sunday. What was my disappointment upon opening the basket to find the fine peaches only on top, about a dozen of them, the

rest being small, half ripe, fit only for cooking. Here I was paying \$8 per bushel for a very inferior fruit. I happened to know that in the adjoining State of Missouri, better peaches could be bought for 15 cents per bushel. Of course I want no more such peaches at those prices. The nice packages were all right, and added greatly to their selling value. It is also valuable to put the best on top, just as we put the whitest comb honey next to the glass; but it is down right dishonesty to put an entirely inferior grade where it cannot be seen.

There is also something radically wrong with the distribution, when peaches are allowed to rot, or are hauled to some neighboring "still house" and sold at 15 cents per bushel, which, at a reasonable price, could be readily sold, only a few hundred miles away. As long as there are no better means of distributing this fruit, the producer in Missouri will mourn that he cannot get more than 15 cents per bushel, and the man in Illinois will lament that he cannot buy it without paying \$8 for them.

EQUALIZING THE MARKETS.

The same conditions, in a less degree, apply to honey. Surely, with all our railroad and river transportation, there ought to be very much less difference in the selling and buying prices as here indicated. How many people can buy fruit at such prices? How many thousands of baskets is the demand cut short? I do not pretend to say where all this difference goes; if to the railroads, it is certainly a very short-sighted policy, as they could as well carry ten times the quantity, and by lower rates still greatly increase their receipts. If the trouble is with the packers or commission men, then their methods are equally short-sighted. It is quite likely that there are entirely too many of the middle men in the business.

Why cannot the producer pack and ship his own fruit or honey direct to the retail dealer or commission man? Then if there are over-charges they can be more easily located and avoided. I believe in allowing every one a fair profit for doing a necessary and fair business. I fail to see where any one is permanently benefited, where by any circumstances they can force prices so high that people cannot afford to buy, and often let goods go to waste.

Milan, Ills.

For the American Bee Journal.

Moving Bees before Wintering, etc.

THOMAS STOKES.

As Query 481, on page 644, relates to moving bees before winter, and having had experience the past year in that particular, I will give it for the benefit of those interested.

Last fall I had occasion to move to a new place about a quarter of a mile distant. Having built a workshop

with a cellar under it, and not being able to move the bees early, in consequence of the premises being occupied with young children in the family, my only resort was to move them at the time, and directly place them in the cellar, as I reported last winter on page 153.

They wintered well, to all appearance, and in the spring they seemed in good condition, with only a reasonable amount of dead bees. On April 8 I removed 10 colonies from the cellar, it being a fine day, and the same evening I returned 8 of them, packing the supers in the others with straw to keep them warm. The balance of the colonies were left in until the end of April, without a flight until fine weather.

In this locality, nearly four weeks of continued fine, dry weather brought on the blossoms early, and abundantly, so that I could extract from nearly all by the end of May. Those left out from the first, continued steadily to increase, and one colony swarmed on June 6; while those having a flight came out next best, and those left in until nearly May dwindled down very much, the steady work day after day wearing the old bees out before young ones were hatched in sufficient numbers to keep up the strength of the colony. Those put out for a flight, on removing them, finally had a good deal of brood, while those having no flight had little or no brood.

Of course this was an exceptional year, but my experience based on it, would be that if they had to be placed in the cellar without a flight, I would give them one as early as possible next spring, and return them or pack them on putting them out, and leave them.

MY REPORT FOR 1887.

I started on June 1 with 29 colonies, from good ones to mere nuclei, and increased to 58 by the first week of July, nearly all by natural swarming, and all but 2 colonies having swarmed by that time. I took 600 pounds of honey, mostly extracted. I think there is much experience gained this year not to be found written in the books. For I for one was not calculating on so sudden a cut-off of nectar, but was managing to have all swarming done awhile before linden bloom, *a la Doolittle*; and when nearly accomplished, on came the linden fully 10 days ahead of other years, and with it the close of the honey season; while in previous years our most surplus is obtained from July 15 to the end of August, and during that time this year they did not get enough for brood-rearing, but have consumed a large amount of stores.

The dry weather continued here until Oct. 1, when it was wet for two weeks. I have doubled back my colonies to 39, and they are not all as heavy as I could wish. Had I known it, more surplus could have been obtained by giving more room and discouraging swarming a short time longer; but instead I have a lot of good combs ready for use when next season arrives.

Minesing, Ont., Oct. 19, 1887.

Rural Canadian Display at the Toronto Exhibition.

This department of "Canada's Greatest Fair" was located the present year in the southern half of the dairy building, an arrangement which gave ample accommodation inside, but allowed no exterior space for hives, tents, clamps, and other bulky fixtures. The honey-house used heretofore was much too strait, both for the exhibit and the visitors who wished to see it. Now that the association is flush in funds, it would be well to erect a building specially for the accommodation of honey-producers and dealers in aparian supplies.

It is well known that the present season has been an unfavorable one for the interests of bee-keepers. A hard winter was followed by a dry, hot summer, during which the honey-flora bloomed but sparingly, and was very deficient in liquid sweetness. Consequently the crop of honey is short, so much so, that some who have been prominent exhibitors heretofore, have not a pound of honey to sell or to display to the eyes of an admiring public. Still, it is only by the conspicuous absence of noted exhibitors that any impression would be gathered that the season of 1887 has been a bad one for honey. There seemed to be abundance of it in jars and cans of all sorts and sizes; also, in sections and section-cases of various dimensions and shapes. The quality of this year's honey is very fine. It is unusually thick and rich. Sometimes there is complaint of honey being thin and watery. This is apt to be its character in a dropping summer. However deficient in quantity, it is A No. 1 in quality the present year. The samples competing for prizes were so uniformly good as to puzzle the judges.

Large quantities of honey were sold in the course of the Exhibition. In addition to the supply brought for show purposes, orders were taken for future delivery, at good prices. Bee-keepers will not have to complain of a slow or a low market the present year, and perhaps the demand, whetted by scarcity, will be all the keener in years to come than it would have been under the influence of a continued glut.

It will be well for all whom it may concern, to take notice that hereafter the cutting of honey for sale is to be prohibited at the Toronto Industrial, as it ought to be at all exhibitions. This practice is messy and slovenly, attracts the bees of the neighborhood in large multitudes, making visitors nervous and fearful of being stung; and though many pounds of honey are sold by means of it, there is room to question if the greatest good of the greatest number is secured by it. At any rate, the fiat has gone forth, and such bee-keepers as want to sell 5 cents' worth of comb honey at the Toronto Industrial hereafter will have to get their bees to fill quarter-pound sections.

Several novelties in the way of aparian fixtures were on exhibition.

Among them, and well worthy of notice, is a new method of fastening comb foundation in sections, by means of an ingenious little machine, in which heat is applied to the section and pressure to the comb foundation. Confectionery of various kinds, prepared with honey, made an attractive display, but it is very doubtful if honey can be economically substituted for sugar in such preparations. Properly speaking, honey is itself a confection. It should not be brought into competition with sugar as a sweetener, being itself a perfect sweet-meat from nature's pantry.

On the whole, the exhibit of honey and aparian supplies at the recent Toronto Industrial proved conclusively that bee-keeping is abreast with other lines of productive business, both in methods and results. Visitors from abroad, competent to judge, did not hesitate to pronounce the opinion that no country in the world can surpass Canada, either in the excellence of its honey or the skillfulness of management on the part of its bee-keepers.

For the American Bee Journal.

The Season of 1887, etc.

J. V. CALDWELL.

The harvest is past, and the summer is ended—and I have no honey.

This has been the poorest season for honey since I have been in the business except one, in 1879. I had to feed a large amount of sugar syrup for winter stores. I have just finished fixing up my bees for the winter by equalizing stores; there is enough for all. They are all in excellent condition for winter, and if it was not for the reason that the clover is badly killed by the dry weather, and consequently not so good a prospect for next season, I would be contented, as I believe that the failure this season will result in better prices for several years to come. The country will be cleared of the overstock of honey. What little honey consumers get this winter will be at a better price, and it will be easy to keep the price up for some time.

And it will close out a lot of small producers, who, if they have a few hundred pounds of honey, rush it into market at any price, thinking they are going to glut the market. One of that kind lives a few miles from me. He had 18 colonies last spring. He bought 8 pounds of foundation and 500 section boxes. About the time clover began to bloom, he came to town and went around to the stores and to private houses engaging honey in sections at 10 cents per pound. Well, he did not bring very much honey; he was getting the "bulge" on me in selling his honey.

This same man came to me a few days ago, to learn how to feed his bees. I told him that he had better get some book on bee-keeping, and subscribe for a bee-paper. I used to have a good home market for my honey, but a few of the same kind as

the man I have mentioned, spoiled my trade last season. I sold but little comb honey at home, and could not do as well as to ship it.

I have a little of last year's honey on hand; not much, but I am getting my own price when I let it go. From what I can learn from small bee-keepers in this vicinity, I think there will be but few bees left in the spring, many colonies are dead now.

INVENTION OF THE TIN-T CASES.

As there is considerable talk about T-tin cases, I would like to know who is entitled to the honor of having first made and used them. My neighbor, Mr. J. B. Keeler, and myself made and used them in 1876, and have used them ever since. Who made and used them before the Centennial year?

MARKET REPORTS OF HONEY.

A short time ago, I thought, as I was going to St. Louis, that I would buy a lot of both extracted and comb honey, as the prices quoted in the BEE JOURNAL would give me a good profit, for I could readily sell comb honey for 20 cents, and extracted at 12½ cents per pound. The price of comb honey was reported at 10 to 12 cents, and extracted in barrels at 4½ to 5½ cents. I called, and found the commission house had on hand two 5-gallon cans, and six quart-jars of California honey: but not a pound of comb honey in the shop! They thought I could not get it in the city, as honey was very scarce, and none coming in. Query: How did that firm know that 10 to 12 cents per pound was all that comb honey would bring in the market?

I went to nearly all the dealers, and could not find a pound of comb honey. A house that has sold a great deal of honey for me, said that they could easily get 20 cents for such as I usually sent them, if they had it. Valuable market report!

Carlinville, Ills., Oct. 22, 1887.

[Such market reports are an insult to bee-keepers.—ED.]

Gleanings.

Bees in the Cumberland Mountains.

DR. O. M. BLANTON.

Here I am, far away from home, at Mount Eagle, Grundy County, Tenn., on the Sewanee range of the Cumberland Mountains, 2,300 feet above the level of the sea. This is a health-resort, conducted on the plan of Chautauqua, in New York, where persons can enjoy themselves in religious exercises, lectures on various scientific subjects, and the study of all branches of learning in the schools here established for the mental improvement of the visitors assembled.

The atmosphere is balmy and health-giving, with a temperature during the summer months of 65° to 85°. The top of this mountain-range is a plateau extending fifty by about five miles wide, with some of the grandest scenery the lover of nature could desire.

I here met Mr. Albert Wells, of South Pittsburg, Tenn., an old bee-keeper who has an apiary of 30 colonies three miles from this village, located on a cliff that commands the view of Battle Creek Valley, with its grand palisades, coves, and chasms. On the plateau there is a great variety of honey plants, such as goldenrod, eupatorium (boneset), asters, and lespedeza (Japan clover); also trees and shrubs; chestnut, black locust, sourwood, and sumac. I observed in the fields, on the commons, roadsides, and every open space in the forests, lespedeza growing in the greatest luxuriance. As to its capacity to produce nectar for bees, I know nothing; but for its presence, cattle would suffer during the winter months.

The sides of the mountains and the valleys below are rich in the most valuable timber, such as poplar, basswood, black locust, walnut, oak, and hickory, with redbud, dogwood, and red-haw. The usual wild flowers (perennials) abound, and are prolific in nectar, owing to the rich and damp soil with its many delightful springs.

The bowels of the earth abound in coal and iron. The railroad running along the crest of the mountain was constructed for the conveyance of coal and coke from the mines. I consider this a paradise for the bee-keeper, especially when in quest of health.

With the exception of Mr. Wells, all keep their bees in "gums," as their forefathers did. Mr. Wells' bees are in good condition, although his yield of honey has been small, owing to ill-health preventing the proper attention being given them. I shall try a few here next year, as an experiment and pleasant pastime, with the hope of stimulating the old-fashioned bee-keepers to scientific methods of handling bees.

My apiaries at home, Greenville, Miss., I farmed out to my head bee-keeper, Mr. Alfred Latta, on shares; and from what I can learn they will not yield more than half a crop—about 20,000 pounds.

The cold spring, with excessive rains in June and July, and severe drought in August and September, are the causes. I return home in a few days, as the forests are putting on the sere and yellow leaf, and the cotton harvest of the valley is demanding my attention.

Mont Eagle, Tenn., Sept. 28, 1887.

For the American Bee Journal.

My Experience with Bees, etc.

H. BRAMLET.

I commenced 3 years ago with one colony of black bees, and I wintered them on the summer stands, on from 5 to 7 Langstroth frames. I began the season of 1887 with 13 colonies, and now have 23 in fair condition, without feeding. I realized \$15 from the sale of bees and honey, after paying for four queens from four different breeders; and "last but not least," our own table has been pretty well supplied. My bees are Italians

and hybrids, and the queens are all pure, but some of them were impurely mated.

The season here has been about an average with the general reports. The black bees in this section that did not abscond in the summer will nearly all starve the coming winter. I have about 300 sections filled with from one-third to full drawn comb, nicely cleaned up and arranged in supers with the full drawn comb on the outside, and those with the shallowest cells in the centre, packed away for next year.

Raleigh, N. C., Oct. 25, 1887.

American Agriculturist.

Early Winter Management of Bees.

A. H. DUFF.

Success with bees depends largely upon fall management. At no other time in the year is more careful manipulation required than in preparing bees for winter quarters. To place a colony in the best possible condition, a fair amount of brood-rearing should be kept up during August and September. In most localities, very little if any honey can be gathered by bees during those months. Hence, brood-rearing is checked, and very few, if any, young bees are hatched during this time.

So at the beginning of winter the colonies go into quarters, made up of old bees that are certain to die in large numbers with old-age before spring, leaving weak colonies to commence the season's work. It is therefore important to see that the necessary amount of breeding is kept up during the fall months to furnish young bees to stand the long confinement of winter. This is in the power of every bee-keeper, by simply feeding enough to stimulate brood-rearing, during the scarcity of natural stores.

It is also necessary that every colony should contain a good fertile queen. The queen is the life of the colony, and, however careful we have been in other particulars, if we have omitted this important part, it certainly will endanger the loss of the colony.

Every colony should have 25 or 30 pounds of good sealed honey to carry it through the winter, and if the bees lack the required amount, they should be fed. If the feeding is done in September, the weather being favorable, it will allow the bees to seal up their stores, which is very important, before going into winter quarters. It has been pretty generally settled by bee-keepers that granulated sugar is the only safe food for bees during winter. It is not advisable under any circumstances to attempt feeding honey or syrups of any kind to bees during cold weather; it will produce diarrhea, and increase the loss of the colony. Syrups made in the form of candy may be used, but must be given them during a warm day, when they are flying freely.

Out-door wintering in chaff hives is preferred by a great number of api-

rists, though many winter their bees successfully in cellars. But no one can reasonably expect much profit from bees which are allowed to stand out in unprotected hives all winter. The work of placing in winter quarters should be done before steady cold weather sets in, and then they should be allowed to remain undisturbed. Stock of every kind should be excluded from the apiary at all times, but poultry may have the range of the apiary.

Bees need little attention during winter. At the approach of a warm day, see that the entrance to each hive is open, so that the bees can have free passage out and in. During cold weather it will do no harm if the entrance, or even the hives, are totally covered with snow; it serves as a protection.

Ohio.

For the American Bee Journal.

The Kentucky State Convention.

The Kentucky State Bee-Keepers' Society met in the Court House in Falmouth, Ky., on Oct. 18, 1887, at 10 a.m. President Rev. L. Johnson not being present, Mr. Peter McVean was called to the chair, and Alex. W. Stith, of Portland, Ky., was appointed Secretary *pro tem.*

After the transaction of the usual business of the society, the convention proceeded to elect the officers for the ensuing year, which resulted as follows: President, Alex. W. Stith, of Portland; Recording Secretary, G. W. Demaree, of Christiansburg, and John S. Reese, of Winchester, Corresponding Secretary. Vice-Presidents were chosen for the following counties: Henry county, Dr. L. E. Brown; Kenton, Peter McVean; Shelby, E. Drane; Mason, W. C. Pelham; Boone, R. A. Connley; Gallatin, J. T. Connley; Grant, Mrs. Clay White; Harrison, T. W. Smith; Mercer, Egbert Salvisa; Clark, Mr. Green, of Winchester, Ky.; Scott, J. K. Northcutt; and Fayette, Walter B. Downing.

Short speeches were made by Messrs. Stith, Thornton, and Demaree, on the subject of getting bees ready to gather the early honey harvest. Dr. Henry made extended remarks on the subject of adulterating honey. Mr. McVean thought that the danger to the business of bee-keeping, on account of the nefarious practice, so common a few years ago, of buying up and adulterating honey, was all past now. Mr. Demaree said that honey must be sold on the reputation of the producer.

The convention adjourned then for dinner.

AFTERNOON SESSION.

The convention was called to order by President Stith, and the names of the following persons were enrolled as members of the society: Thos. S. Tomlin, S. M. Blackburn, W. G. Gosney, R. M. Houston, Luther Bradford, B. L. Colvin, S. Taylor, and I. W. Wright.

The Question Box was then opened, and nearly every phase of bee-culture

was discussed. Mr. Bagley gave his method of introducing queens, which was new to many of those present. He cages the queen with some of the bees belonging to the colony to which the queen is to be introduced, and after giving them a "big scare" by shaking them up, he introduces the queen, bees and all directly to the queenless colony.

Reports were made from several parts of Eastern and Central Kentucky, and the facts show that the honey crop was shorter the past season than at any time heretofore. But bees have gathered plenty of honey from goldenrod and the little white and purple asters for winter stores. On this account bee-keepers in those sections of the State are feeling very much encouraged.

Rev. L. Johnson, of Walton, Ky., formerly President of this society, sent a written report, giving a most encouraging account of the prosperity of bees in his part of the State. Since the fall rains revived vegetation, colonies that were near the starving point at the close of the summer drouth, have filled up their hives with choice honey from goldenrod and the several varieties of asters, and will go into winter quarters well supplied with stores.

G. W. Demaree, by request, addressed the assembly on the good work accomplished by the Kentucky Bee-Keepers' Society, and the future of bee-culture in our State. He pressed the fact that the members of this Society are peculiarly fitted to push forward and keep up this branch of husbandry, and if they fail on account of loss of interest in the good work, there will be none to take their place. Bee-culture demands more study and more skill than any other rural employment, and hence our ranks are not likely to swell to great dimensions. He showed that bee-culture is not necessarily a "little business." No honest and decent employment which pays well on the money invested and labor employed can be "little" in any sense. What our State needs most now, is more "little successes" and less "big failures."

After a harmonious session, the convention adjourned to meet at time and place to be fixed by the executive committee.

G. W. DEMAREE, Sec.

Gleanings.

Equalizing Prices for Honey.

DR. C. C. MILLER.

I am decidedly in favor of the publication of market reports. I am satisfied, however, that sometimes harm is done by them. I think they are often incorrect—I know they have been sometimes. At one time I took the pains to go to about every house where honey was wholesaled in Chicago, and I could not buy honey within several cents of the price quoted in the bee-papers and daily papers. I went to the office of the leading daily which gave honey quotations

and asked why they did not give correct reports. They said they published what was given them. I showed them the statement of sales of my own honey by a commission house, and they said it was a revelation to them, as they had had no opportunity of looking "behind the scenes" prior to this, and immediately the quotations were changed a few cents higher.

With no thought of doing any great harm by it, the commission men sometimes report a lower figure than they are selling at, so that, when they make returns to their customers, the customers will be well satisfied when they see they are getting more than the market price according to the printed quotations. But as these printed quotations are often used as a help in fixing prices elsewhere, any other than a correct report may be mischievous.

Even if correct reports are given, an incorrect use of them is often made. Mr. Jones lives at such a distance from the nearest city market, that, after paying freight and commission, he receives net about 3 cents less than the price at which the honey is sold; so, if the price at the city market is 12 cents per pound, he receives 9 cents net, and will do better to sell at home for 9 cents. Taking this view of it, he settles upon the plan of fixing his price in all cases 3 cents below the city price. This may be all right, and it may be all wrong. If his crop of honey, together with that of his neighbors, is so large that some of it must be shipped to distant markets, his plan may be all right.

But suppose the crop is short, and Mr. Jones follows the same rule, selling at 9 cents because the city price is 12. The grocers sell out all of his honey, which he has sold to them at 9 cents, and then buy from the city, paying 12 cents and freight for it. If Mr. Jones had none they would pay 12 cents and freight, say 13 cents for all. Now, is there any reason why in this case he should not sell for 13 instead of 9 cents? The same rule holds in other things. Years ago, the farmers about Marengo shipped their grain to Chicago, and I could buy corn from them at less than the Chicago price; but of late, dairying is so extensive that more corn is consumed than raised, and I have to pay more than the Chicago price. So the prices for honey should be higher or lower than city prices, according to circumstances.

Marengo, Ills.

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When Renewing your subscription please try to get your neighbor who keeps bees to join with you in taking the BEE JOURNAL. It is now so cheap that no one can afford to do without it. We will present a Binder for the BEE JOURNAL to any one sending us three subscriptions—with \$3.00—direct to this office. It will pay any one to devote a few hours, to get subscribers.

Local Convention Directory.

1887. Time and place of Meeting.	
Nov. 16.—Western, at Kansas City, Mo.	J. A. Nelson, Sec., Muncie, Kans.
Nov. 16-18.—North American, at Chicago, Ills.	W. Z. Hutchinson, Sec., Flint, Mich.
Nov. 19.—Marshall County, at Marshalltown, Iowa.	J. W. Sanders, Sec., LeGrand, Iowa.
Dec. 7-9.—Michigan State, at East Saginaw, Mich.	H. D. Cutting, Sec., Clinton, Mich.
Jan. 7.—Susquehanna County, at New Milford, Pa.	H. M. Seeley, Sec., Harford, Pa.
Jan. 20.—Halidam, at Cayuga, Ontario.	E. C. Campbell, Sec., Cayuga, Ont.

In order to have this table complete, Secretaries are requested to forward full particulars of time and place of future meetings.—ED.

SELECTIONS FROM OUR LETTER-BOX

Legislation for Bee-Keepers.—Dr. C. C. Miller, Marengo, Ills., on Oct. 27, 1887, writes:

I was not a little surprised to see in the programme for the Chicago Convention, my name attached to the subject, "Legislation for Bee-Keepers." Bro. Hutchinson is, I suppose, responsible for it, but I do not want to scare any one away from what I hope will be a good convention, by the thought that I am anxious to take up a large amount of time with a subject so generally misunderstood, and when thus misunderstood so generally disliked. I have had my say in the matter; I think I am right, and trust to time and sober second-thought to bring others to the right view, rather than to take up the time of the convention.

I can imagine no more convenient arrangement than having the convention at the hotel, especially one so central as the "Commercial," and at the same time so good a hotel.

True Condition of the Bees.—J. M. Bailey, La Porte City, Iowa, on Oct. 19, 1887, writes:

About Nov. 15, 1886, I put into a cellar 88 colonies of bees, and last spring I took out 87 colonies in good condition, being a loss of only one. During this season, however, they have not done so well. I have now only 62 colonies, a loss of 25, and they are generally in poor condition. In addition to this, I have realized no surplus honey, and will be compelled to feed considerably in order to preserve the bees now on hand. I think that it would be a good idea if all bee-keepers would report the true condition of their bees.

Results of the Season, etc.—W. H. Shaner, Leechburg, Pa., on Oct. 24, 1887, writes:

I wintered 18 colonies on the summer stands packed in chaff; one-fourth came out in good condition, and the rest were very weak. I got 100 pounds of surplus, principally

from a patch of Alsike clover. I could smell the bloom 8 rods from the patch. I sowed 3 pecks of Alsike in the spring, and I hope to make a better report next year. The drought still continues. Three Italians outstripped the blacks by far. I got queens and Italianized all my colonies without losing a queen. I introduced five on Mr. Doolittle's plan, as given on page 309. I have fed 150 pounds of sugar for winter. I have a good cellar where potatoes and apples never freeze. Would you advise me to winter my bees in this cellar?

[Yes; if you can ventilate it properly, and can keep the temperature at 45°, it ought to be a good place for bees in winter.—ED.]

The Season's Results.—H. H. Stewart, Galt, Ills., on Oct. 23, 1887, writes:

Last fall I put 91 colonies into winter quarters, and in the spring I had 60 of them left. I made 100 hives at \$1.50 each, \$150; spent 6 months taking care of the bees, at \$30 per month, \$180; fed 600 pounds of honey and sugar, \$50; expectations, \$400; total, \$780. Increase: Two swarms, \$5; Honey, \$0; total, \$5. Loss, \$775. We must have a better season next year, or there will be one less bee-keeper.

Smart-Weed, Rag-Weed and Plantain.—E. W. Councilman, Newark, Valley, N. Y., on Oct. 8, 1887, asks the following questions:

1. What is the name of the specimen of a flower which I send. I noticed the bees working on it this fall quite briskly. 2. Does rag-weed and plantain yield honey? I have heard bee-men say that neither of them yielded honey, only pollen.

[1. The specimen is smart-weed or heart's-ease (*Polygonum Pensylvanicum*), long celebrated as an excellent honey-plant.

2. Neither plantain nor rag-weed produce honey. The rule has no exception, that the flowers which are neither conspicuous nor fragrant have no nectar; at least no such exception is known to me.—T. J. BURRILL.]

Selected Honey.—Mrs. C. W. McKown, Gilson, Ills., writes:

No doubt quite a number of suggestions have been made, regarding a new name for extracted honey, and among others permit me to suggest the term "selected" honey. This term itself signifies purity and excellence, as well as "extracted" or "drawn" from; and then, too, the word "selected" might possibly have a tendency toward suppressing the superstitious idea that exists in the minds of some people, with regard to the product being adulterated, and also add new tone and vigor to the sale of it.

Little Surplus Gathered.—Jesse Perry, [©] Iowa, on Oct. 17, 1887, says:

I commenced the season with 37 colonies of bees, increased them by natural swarming to 45, and obtained 300 pounds of honey in one-pound sections, from basswood and sweet clover. The basswood bloomed some two weeks earlier than usual, and yielded fairly well for a few days; but the brood-chambers being empty of honey, I got but little surplus. My bees stored some honey from heart's-ease and goldenrod in September—enough for winter stores. They are in fair condition for winter, I think. I winter my bees on the summer stands.

Plenty of Honey for Winter.—Oscar M. Pierson, Tampico, [©] Ills., on Oct. 25, 1887, says:

I commenced the season with 2 colonies, increased them to 7 by natural swarming, and have taken 35 pounds of comb honey in one-pound sections. All of my colonies have plenty to winter on. I shall winter them in a good, dry cellar.

Convention Notices.

Union Convention at Chicago.—The North American Bee-Keepers' Society and the Northwestern Bee-Keepers' Society will meet in joint convention at the Commercial Hotel, cor. Lake and Dearborn Streets, in Chicago, Ills., on Wednesday, Thursday and Friday, Nov. 16, 17 and 18, 1887. Arrangements have been made with the Hotel, for back room, one bed, two persons, \$1.75 per day, each; front room, \$2.00 per day each person. This date occurs during the second week of the Fat Stock Show, when excursion rates will be very low.

The following are the subjects for discussion, so far as has been determined upon:

Cost of the Production of Honey—J. H. Martin, Hartford, N. Y.

Controlling the Price of Honey—M. M. Baldwin, St. Charles, Ills.

Getting the Best Price for Honey—E. J. Oatman, Dundee, Ills.

Commission Men and the Honey Market—R. A. Burnett, Chicago, Ills.

Legislation for Bee-Keepers—Dr. C. C. Miller, Marengo, Ills.

Objects and Methods of a thorough Organization of the Bee-Keepers of America—Thomas G. Newman, Chicago, Ills.

Comb Foundation, its Manufacture and Use—C. P. Dadant, Hamilton, Ills.

Production of Extracted Honey for Table Use—T. F. Bingham, Abromia, Mich.

The Production of Comb Honey—W. Z. Hutchinson, Flint, Mich.

Production of Comb and Extracted Honey in the Same Apiary—J. A. Green, Dayton, Ills.

Out Apiaries—D. A. Jones, Beeton, Ont.

Foul Brood, How Shall we Treat It?—A. I. Root, Medina, Ohio.

Wintering Bees in the Northern States—R. L. Taylor, Lapeer, Mich.

Bee-Hives and Fixtures—James Heddon, Dowagiac, Mich.

Bee-Keeping alone, or with Other Pursuits; if the latter, in connection with what?—Eugene Secor, Forest City, Iowa.

Legs of the Bee—Prof. A. J. Cook, Agricultural College, Mich.

What is the Best Name for Extracted Honey?—Thomas G. Newman, Chicago, Ills. W. Z. HUTCHINSON, Sec.

The Western Bee-Keepers' Society will hold a meeting on Wednesday, Nov. 16, 1887, at the residence of Mr. Peter Otto, corner of Park and 25th Streets, Kansas City, Mo. Take the 18th Street horse-cars at 9th & Main Sts. for 18th & Brooklyn Sts., thence walk south to 25th St. and thence east one block to the house. We are sure of a cordial welcome from Mr. and Mrs. Otto, and expect a good meeting.

JAS. A. NELSON, Sec.



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At One Dollar a Year.

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Special Notices.

To Correspondents.—It would save us much trouble, if all would be particular to give their P. O. address and name, when writing to this office. We receive letters some inclosing money that have no name; many others having no Post-Office, County or State. Also, if you live near one post-office and get your mail at another, be sure to give the address we have on our list.

As there is Another firm in Chicago by the name of "Newman & Son," we wish our correspondents would write "American Bee Journal" on the envelope when writing to this office. Several letters of ours have already gone to the other firm (a commission house), causing vexatious delay and trouble.

We will Present Webster's Dictionary (pocket edition), and send it by mail, postage paid, for two subscribers with \$2. It is always useful to have a dictionary at hand to decide as to the spelling of words, and to determine their meaning.

Sample Copies of the BEE JOURNAL will be sent FREE upon application. Any one intending to get up a club can have sample copies sent to the persons they desire to interview, by sending the names to this office or we will send them all to the agent.

Money Orders can now be obtained at the Post Offices at reduced rates. Five dollars and under costs now only 5 cents. As these are absolutely safe, it will pay to get them instead of the Postal Notes which are payable to any one who presents them, and are in no way safe.

Simmins' Non-Swarming System.—We have received another shipment of these books, and have made such favorable terms, that we will now club them with the BEE JOURNAL for one year, both postpaid, for \$1.25. We can supply all orders by return mail. The subscription to the BEE JOURNAL can be for next year, this year, or may begin anew at any time.

California Excursions.

At frequent dates of each month, the Burlington Route, C. B. & Q. R. R., runs excursions to San Francisco, Los Angeles and San Diego, at greatly reduced rates of fare. By the "Burlington" one can have a choice of routes to California, as its lines from Chicago, Peoria and St. Louis extend to Denver, Council Bluffs, Omaha, Saint Joseph, Atchison and Kansas City. Should one desire to make the return trip via Portland, Oreg., they can continue their journey south or east from St. Paul or Minneapolis, over the Burlington Route, to Chicago, Peoria or St. Louis. For California excursion dates, rates, tickets or further information, apply to ticket agents of the C. B. & Q. or connecting railroads, or address Paul Morton, General Passenger and Ticket Agent, Chicago, Ills. 43A

A Valuable Book Given Away.—We have made arrangements by which we can supply the AMERICAN BEE JOURNAL and the New York World—both weekly—for one year, for \$2.10, and present the subscriber with one of these books, bound in Leatherette Free Calif.:

HISTORY OF THE UNITED STATES—from 432 to 1887.—\$20 pages.—Price, \$2.00.

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The extra 10 cents is for postage on the book, which must be selected by the subscriber at the time of sending the subscription, and cannot be afterwards exchanged.

The book selected will be mailed in a cardboard case, at the subscriber's risk; if lost it cannot be replaced. Be sure to write your name, post-office, county and State plainly, and then the risk of loss is very small. The subscriptions can commence at any time.

Remember, the amount is \$2.10 for both papers, and the Book and postage.

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Sow two years running, on the same land, and the honey crop will be without intermission. Money invested in Sweet Clover Seed will prove a good investment. The Seed may be obtained at this office at the following prices: \$6.00 per bushel (60 lbs.); \$1.75 per peck, or 20 cents per pound.

We have a large quantity of CHOICE WHITE EXTRACTED HONEY, in kegs holding from 200 lbs. to 225 lbs. each, which we will deliver on board the cars at 10 cents per lb. Orders solicited.

Preserve your Papers for reference. If you have no BINDER we will mail you one for 60 cents, or you can have one FREE if you will send us 3 new yearly subscriptions for the BEE JOURNAL.

Enameled Cloth for covering frames, price per yard, 45 inches wide, 20 cents; if a whole piece of 12 yards is taken, \$2.25; 10 pieces, \$20.00; if ordered by mail, send 15 cents per yard extra for postage.

Honey and Beeswax Market.**CHICAGO.**

HONEY.—We quote : White clover 1-lb. sections 2@1c.; 2-lbs., 18@1c.; dark 1-lbs. 17@1c.; 2-lbs. 15@1c. Receipts continue light, and prices tend higher.

Oct. 14. S. T. FISH & CO., 189 S. Water St.

CHICAGO.

HONEY.—We quote : White comb in 1-lb. sections or about brings 18@2c., some fancy shipments are held at 2@1c.; 2-lb. sections, 18@1c. Dark honey is slow sale. Extracted. 7@1c.

BEESWAX.—22@2c. R. A. BURNETT,
Oct. 20. 161 South Water St.

DETROIT.

HONEY.—Best white in 1-lb. sections sells as high as 10c. A few lots are held at 20c. Demand increases as fruit becomes scarce.

BEESWAX.—22c. Oct. 21. M. H. HUNT, Bell Branch, Mich.

CLEVELAND.

HONEY.—Best white 1-lbs. sell readily at 19@20c. 2-lbs., 17@1c. White clover extracted, 8c.

BEESWAX.—25c. Oct. 24. A. C. KENDEL, 115 Ontario St.

BOSTON.

HONEY.—New crop, 1-lb. sections, 18@20c.; 2-lb. sections, 17@1c. Extracted. 8@2c. Demand fair.

BEESWAX.—25 cts. per lb. Oct. 22. BLAKE & RIPLEY, 57 Chatham Street.

SAN FRANCISCO.

HONEY.—We quote : Extracted, white liquid, 8@2c.; amber colored and candied, 54@55c cents. White to extra white comb, 15@17c.; and amber, 10@12c. Supplies and demand are small.

BEESWAX.—17@21c. For good quality

Oct. 15. SCHACHT & LEMCKE, 122-124 Davis St.

SAN FRANCISCO.

HONEY.—We quote : White to extra white comb 16@18c.; amber, 10@14c. Extracted, light amber, 8@10c.; amber, dark and candied, 54@55c. extra white would bring 7@8c., but none is in the market.

BEESWAX.—19@22c. Oct. 3. O. B. SMITH & CO., 423 Front St.

NEW YORK.

HONEY.—We quote : Fancy white in 1-lb. sections, 17@19c.; the same in 2-lbs., 15@16c.; buckwheat 1-lbs., 12@14c.; 2-lbs., 10@12c. Off grades 16@18c.; dark, 8@10c. White extracted, 8@9c.; buckwheat, 5@6c.; Southern, per gallon, 60@70 cts. Market seems to be unsettled.

BEESWAX.—22@23c. Oct. 20. MCNAUL & HILDRETH BROS., Sept. 30. 38 & 30 W. Broadway, near Duane St.

KANSAS CITY.

HONEY.—We quote new crop : Choice white 2-lb. sections, 16@17c.; dark 2-lbs., 12@14c.; choice white 1-lbs., 18@20c.; dark 1-lbs., 14@16c. White extracted, 8@10c.; dark, 6@7c. Demand good, but light supply.

BEESWAX.—21 to 22c. Oct. 21. HAMBLIN & BEARSS, 514 Walnut St.

KANSAS CITY.

HONEY.—We quote : Choice white 1-lbs., 20c.; dark 15@16c.; choice white 2-lbs., 18c.; dark, 14c. Extracted, 8@10c. California—white 1-lbs., 18c.; dark, 15c.; white 2-lbs., 16@18c.; dark, 14@15 cts. White extracted, 8c.; amber, 8c. Supply fair.

BEESWAX.—No. 1, 22c.; No. 2, 18c.

Oct. 6. CLEMONS, CLOON & CO., cor 4th & Walnut St.

ST. LOUIS.

HONEY.—Choice comb, 15@18c.; latter price for choice white clover in good condition. Strained, in barrels, 4@5c. Extra fancy, of bright color and in No. 1 packages, 4-cent advance on above. Extracted, in bbls., 5@6c.; in cans, 6@7c. Short crop indicates further advance in prices.

BEESWAX.—20@21c. per lb. Oct. 21. D. G. TUTT & CO., Commercial St.

CINCINNATI.

HONEY.—We quote extracted at \$14@17c. per lb. Demand is good for clover honey in square glass jars from the jobbing trade. No new comb honey in this market, but we would think that choice white would bring 18@20c. in a jobbing way.

BEESWAX.—Demand good—24@22c. per lb. for food to choice yellow, on arrival.

Oct. 20. C. F. MUTH & SON, Freeman & Central Av.

NEW YORK.

HONEY.—We quote : Fancy white 1-lb. sections, 18@19c.; fancy 1-lbs., glazed or unglazed, 17@18c.; fancy 2-pounds, glazed, 15@16c. Lower grades 12@14c. per lb. less. Buckwheat 1-lbs. paper boxes, 11@12c.; same glazed or unglazed, 10@11c.; 2-lbs. glazed, 10c. Extracted, white, 8@9c.; dark, 6@7c. Demand good, market firm.

Oct. 13. F. G. STROHMEYER & CO., 122 Water St.

PHILADELPHIA.

HONEY.—Fancy white 1-lbs., 18@20c.; fair 1-lbs., 13@14c. No sale yet for dark. Extracted, 8c.; Cuba strained, 8@9c. per gallon.

BEESWAX.—24@26c. Oct. 10. ARTHUR TODD, 2122 N. Front St.

MILWAUKEE.

HONEY.—Choice white 1-lbs., 19@20c.; 2-lbs., 18@19c.; fancy white might bring 21@22c. White extracted in barrels or half-barrels, 8@9c.; in kegs, 8@9c.; in cans or pails, 9@10c.; dark in kegs and barrels, 9@10c. Demand good.

BEESWAX.—22@23c. Oct. 26. A. V. BISHOP, 142 W. Water St.

**GLASS PAILS
FOR HONEY.****THESE** Pails are made

of the best quality of clear flint glass, with a ball and a metal top and cover. When filled with honey, the attractive appearance of these pails cannot be equalled by any other style of package. They can be used for household purposes by consumers, after the honey is removed, or they can be returned to and re-filled by the apiculturist.

Prices are as follows:

To hold 1 pound of honey, per dozen, \$1.00
" " 2 pounds " " 2.00
" " 3 " " 2.50

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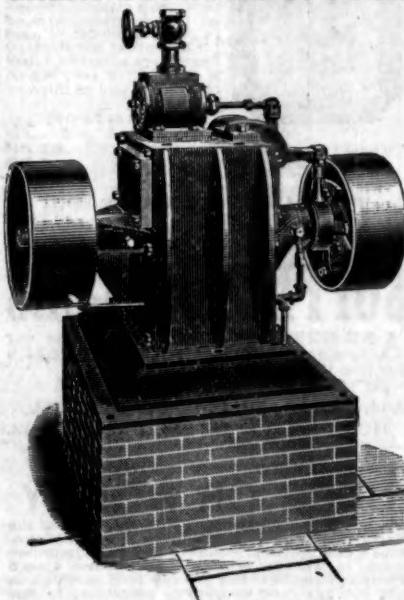
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Excepting with the \$28.00 Extractors, all the different styles have strainers over the can and leading to the honey gate, and movable sides in the Comb Baskets. The \$8.00 and \$10.00 Extractors have no covers.

For 2 American frames, 13x13 inches.....	\$8.00
For 2 Langstroth " 10x18 "	8.00
For 3 " " 10x18 "	10.00
For 4 " " 10x18 "	14.00
For 2 frames of any size, 13x20 "	12.00
For 3 " 13x20 "	12.00
For 4 " 13x20 "	16.00

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For Circulars, apply to **CHAS. F. MUTH & SON,
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HOW TO RAISE COMB HONEY,

PRICE 5 cents. You need this pamphlet, and my free Bee and Supply Circular. **31Atf OLIVER FOSTER, Mt. Vernon, Linn Co., Iowa.**

A Year among the Bees,

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